REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 8, 10-14 and 18-22 are pending in this application. Claims 8 and 12 are amended. Claims 9 and 15-17 are cancelled.

Telephone Interview

Initially, Applicants thank Examiner Raevis for the telephone interview granted Applicants' representative on June 14, 2007. During the telephone interview, Applicants' representative explained the claims were being amended in the manner shown in claims section of this amendment. In response, Examiner Raevis indicated (i) the claims would raise new issues requiring further search and/or consideration and (ii) he would issue an interview summary indicating the amendments to independent claim 8 shown in the preceding section would raise new issues. As a result of the telephone interview, a Request for Continued Examination is being filed concurrently with this Amendment.

Claim Rejections under 35 U.S.C. § 112, first paragraph

Claim 11

Claim 11 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants traverse this rejection as detailed below.

In response to the above rejection, Applicants respectfully submit that support for pending claim 11 is found at least in paragraph [0017] and original claim 11 of the original specification filed on March 16, 2004. Further, Applicants respectfully note that paragraph

[0017] of the original specification has been rephrased as permitted by MPEP § 2163.07, and the slightly rephrased version of paragraph [0017] was included as paragraph [0016.1] in the specification by the supplemental amendment filed February 2, 2007. Paragraph [0016.1] specifically recites the following.

> For example, the pressure applied to the scratcher is decided to be at a low level when the predetermined number of rotation turns of the optical disc is high, and at a high level when the predetermined number of rotation turns of the optical disc is low. Rephrased, the pressure applied to the optical disc is inversely related to the predetermined number of rotation turns of the optical disc according to this embodiment. The pressure applied to the optical disc is within the range of 500 to 1500 gf/cm^2.

Applicants respectfully submit the above paragraph supports the features recited in claim 11.

In light of the above, Applicants respectfully request that the rejection of claim 11 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement, be withdrawn.

Claim 12

Claim 12 also stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants traverse this rejection as detailed below.

Claim 12 is amended to recite "the applying step applies pressure in a range of 0.05 kgf/cm^2 to 5 kgf/cm^2." Support for this range is found in paragraph [0035] of the original specification filed March 16, 2004. In particular, paragraph [0035] includes the following statement, "[t]he pressure of the frame 40 can be in the range of 50 to 5000 gf/cm^2.

Therefore, Applicants respectfully request the rejection of claim 12 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement, be withdrawn.

Claims 16-21

Claims 16-21 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner indicates the terms "jitter value", "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" are undefined and questions how these terms may be used to determine endurance. Applicants respectfully traverse this rejection as detailed below.

Initially, Applicants respectfully submit that each of the terms "jitter value", "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" are well-known in the art and thus, the terms themselves do not need to be further defined. For example, jitter is defined in IEEE 100, *The Authoritative Dictionary of IEEE standards terms*, seventh edition as "[t]ime-related, abrupt, spurious variations in the duration of any specified, related interval," and thus a jitter value is a value representing the variations mentioned in the definition.

Further, the example graph illustrated in FIG. 6 of this application, and the description thereof, indicates how the jitter value may be used to determine endurance. In FIG. 6, as the number of rotations and the pressure applied to the disc increases, the jitter value increases. Further, when the jitter value becomes greater than about 10%, failures occur. As such, by obtaining the jitter value and then comparing the obtained jitter value to a threshold jitter value of 10%, one may determine the endurance. For example, one may determine a disc has sufficient endurance if the obtained jitter value is less than 10% according to FIG. 6. Applicants respectfully submit that a "symbol error rate", "bit error rate", "servo error signal", and "tracking error signal" may be used in a similar manner as jitter value to determine endurance. Therefore, Applicants respectfully submit that at least FIG. 6 and paragraphs [0035]-[0037] of the specification provide an enabling disclosure for claims 16-21.

In light of the above, Applicants respectfully request that the rejection of dependent claims 16-21 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement, be withdrawn.

Claim Rejections under 35 U.S.C. § 102(b)

Claim 8 stands rejected under 35 U.S.C. § 102(b) as anticipated by Hayashida et al. (U.S. Publication No. 2002/0054975, herein Hayashida). Applicants respectfully note amended claim 8 includes features somewhat similar to the features of cancelled dependent claims 9, 16 and 17. Because claims 9, 16 and 17 were not rejected as anticipated by Hayashida, this rejection is rendered moot.

Claim Rejections under 35 U.S.C. § 103

Claims 9-17 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hayashida. As indicated above, amended claim 8 includes features somewhat similar to cancelled dependent claims 9, 16 and 17 and thus, arguments patentably distinguishing amended claim 8 over Hayashida are provided below.

Initially, Applicants respectfully note that the method for testing endurance of an optical disc of independent claim 8 recites, *inter alia*, "applying pressure on the optical disc using a scratching unit ***while the optical disc rotates for up to five rotation turns***, so as to produce a scratch on a surface of the optical disc, resulting from a contact with the scratching unit; and determining the endurance of the optical disc ***based on a jitter value of 10%***." Applicants respectfully submit that at least the above-emphasized feature of amended independent claim 8 patentably distinguish over Hayashida.

In particular, paragraph [0091] of Hayashida, which is cited by the Examiner, specifically states that "[t]he abrasion test procedure using abrasive wheels prescribed by ISO 9352 is a test procedure commonly known as Taber abrasion test and is carried out as follows." The remainder of paragraph [0091] goes on to describe the well-known Taber abrasion test. Further, the Examiner cites TABLE 3 of Hayashida as being "suggestive of the use of 5 cycles in an abrasion test."

Applicants note the Taber abrasion test referred to in paragraph [0091] of Hayashida is specifically referenced in the "Background of the Invention" section of the Applicants' specification at page 3, paragraph [0007]. In particular, paragraph [0007] of the Applicants' specification states the following.

> Also, in the taber abrasion test, while using the abrasion wheel, the abrasive wear on the surface of the optical disc is very different from the scratches on the optical disc. Therefore, testing the endurance of the optical disc based on the abrasive wear caused by the abrasion wheel is not appropriate.

Applicants respectfully submit that this is evidence that the example embodiments described in the Applicants' specification and the features recited in amended independent claim 8 are not obvious in view of the Taber abrasion test.

Further, claim 8 recites "applying pressure on the optical disc using a scratching unit ***while the optical disc rotates for up to five rotation turns***." Regarding this feature, the Examiner identifies TABLE 3 of Hayashida as being "suggestive of the use of 5 cycles in an abrasion test" presumably because TABLE 3 includes a column heading of 5 Abrasion cycles. However, TABLE 3 provides no ground to limit the number of cycles to 5 turns since 0 to 500 turns are shown in the table. Further, paragraph [0091], specifically ***teaches away*** from using 5 cycles or less by saying "[f]or general hard coat layers in optical information media, it is

preferred to abrade them by using elastic abrasive wheels selected from CD-10, CS-10F, and CS-17, and rotating the turntable ***over 10*** to 500 cycles under a load of 2.5 N to 9.8 N."

Accordingly, absent impermissible hindsight analysis, the teachings of Hayashida do not render obvious "applying pressure on the optical disc using a scratching unit ***while the optical disc rotates for up to five rotation turns***," as recited in amended independent claim 8.

Further, claim 8 recites "determining the endurance of the optical disc ***based on a jitter value of 10%***," and Applicants submit that Hayashida fails to disclose determining an endurance based on jitter when the optical disc is rotated for a maximum of five rotation turns.

In light of the above, Applicants respectfully submit that amended independent claim 8 patentably distinguishes over Hayashida and respectfully requests that the rejections of claim 8, and the claims depending therefrom, be withdrawn.

CONCLUSION

In view of above remarks, reconsideration of the outstanding rejection and allowance of the pending claims is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, PLC

By _____ 55,149

Gary D. Yacura
Reg. No. 35,416

Scott A. Elchert
Reg. No. 55,149

P.O. Box 8910
Reston, VA 20195
(703) 668-8000

GDY/SAE/ame